



APPENDIX FF CONSTRUCTION SEQUENCING/PRIORITIZATION



APPENDIX FF - CONSTRUCTION SEQUENCING

I-69 Section 5 presents unique challenges that the previous four sections of I-69 did not encounter; conversion of an existing facility that includes both signalized and unsignalized at-grade intersections, uncontrolled side road and drive access as well as full-function grade separated interchanges. In addition, I-69 Sections 1 through 4 will connect to SR 37 in the 4th quarter of 2014 increasing the traffic.

Primary consideration for determination of construction sections includes safety, cross connectivity, access and independent utility.

From a safety perspective, the at-grade intersections and uncontrolled access points present the greatest safety issues. Resolution of the safety issues was of primary concern when developing logical construction sections. Generally, elimination of at-grade intersections is of primary importance in converting existing SR 37 to I-69 as some of the highest accident rates occur at many of those specific intersections.

While the other sections of I-69 were required to maintain or provide cross-connectivity, it could be achieved by constructing mainline structures over the local roads, which presented minimal impacts to the crossing roads as the mainline could be constructed while maintaining traffic on the local roads except for short term closures for construction. Due to terrain constraints and the use of the existing SR 37 facility, local road cross-connectivity for Section 5 will predominately be accommodated by constructing overpasses at many of the local road crossings. This will require detours of most local road during construction of the proposed bridge structures.

In addition, residences and businesses have direct access to SR 37 that will need to be maintained not only during construction, but also in the case where they are to remain. Local access roads will be provided prior to converting SR 37 to interstate standards. Some existing local roads which currently intersect existing SR 37 will be reconnected to these newly constructed local access roads. Closure of these existing intersections should be delayed until the new access road is in place and provides connectivity to an interchange.

In response to the issues of safety, connectivity and access, and to determine logical construction sections, criteria were developed to constrain construction sections.

Due to the probable need to detour local roads during construction over the mainline, and to minimize disruption to the community, adjacent local roads should not be closed/detoured at the same time. In order to minimize impacts to the community, strong consideration should be given to not allow construction activities to restrict traffic on adjacent interchanges.

Construction segments were also developed such that the “transition” locations between construction sections were at a location where there was a common “typical section”.

Based on the above considerations, 14 separate “construction” segments were identified that could be constructed independently; see Figure 1 for a map of the general areas. When evaluating the construction duration for conversion of SR 37 to I-69 with regard to safety and



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driver expectancy, it was determined that a strategy that upgraded the system to interstate standards in the most expeditious manner provided the greatest safety to the users and would minimize the impacts to driver expectancy when going from completed sections of I-69 to the existing conditions of S 37.

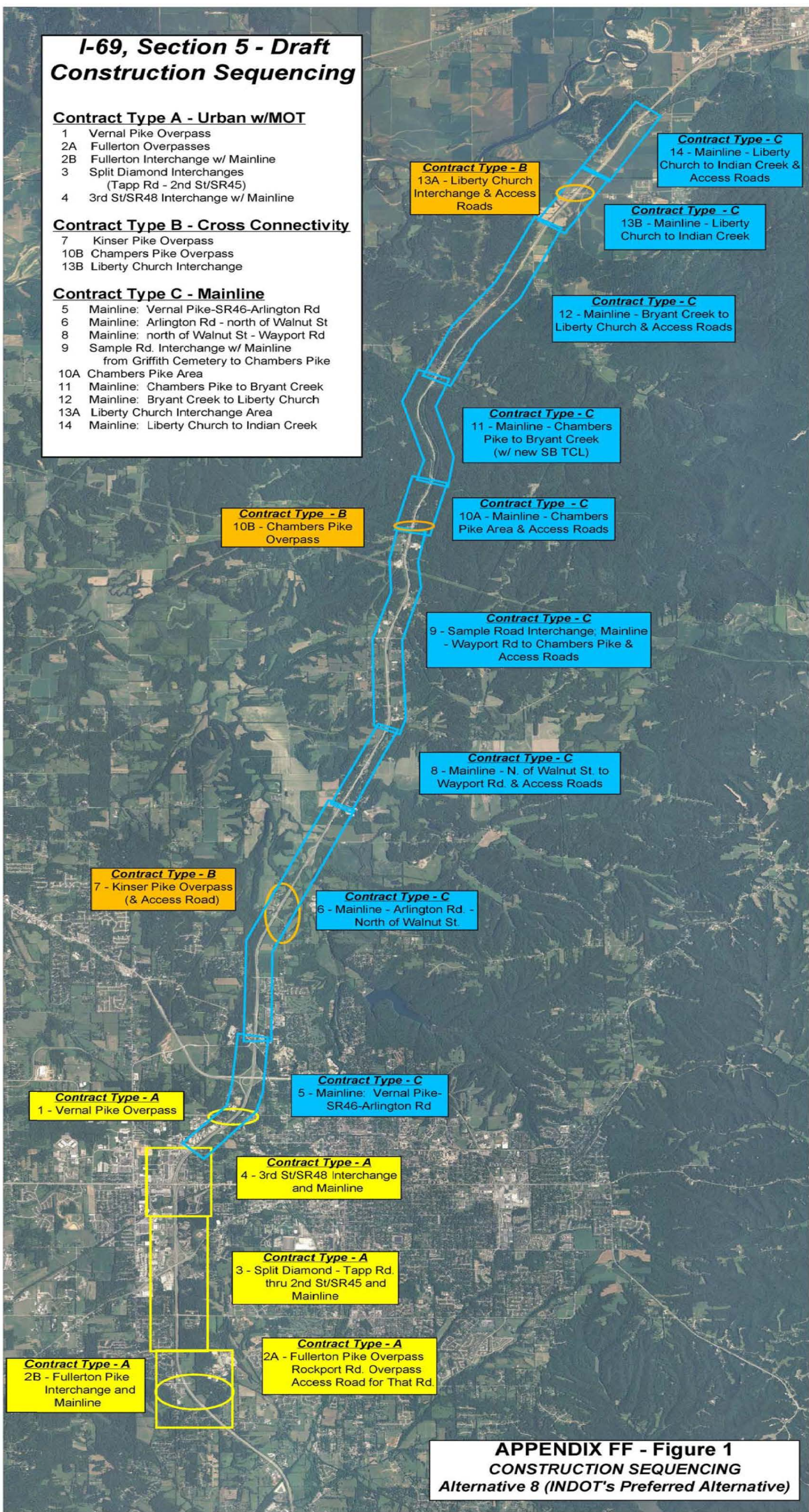
To complete construction of I-69, Section 5 in the timeliest manner, the 14 independent construction segments were separated into 3 construction packages, which in addition to considering safety and cross connectivity, did not restrict adjacent local roads or interchanges at the same time. Construction packaging also considered project types (urban/rural, structures/roadway, pavement reconstruction/overlay, and maintenance of traffic). Three potential Construction packages were developed (see Figure 2) that addresses three independent goals:

- **Package A** – This package addresses the safety, access and mobility issues associated with the urban Bloomington area and would generate the first construction contracts with the goal to provide free-flow traffic through the City of Bloomington.
- **Package B** – This construction package provides the cross-connectivity/access necessary to separate drive and local access roads from SR 37, in effect creating the limited access footprint for conversion to I-69.
- **Package C** – This construction package reconstructs the remaining mainline SR 37 to interstate standards through the rural section of the project.

This potential strategy will achieve conversion of SR 37 to I-69 within the projected time period for construction while at the same time prioritizing safety and mobility within the corridor.

Additionally, it has been determined that the traffic capacity need for the third travel lane (between the south end of the project and the Sample Road interchange) may not be warranted until sometime in the future (see FEIS **Appendix TT**). As part of the final design, construction of the additional travel lane may be considered for deferral until such time as the traffic capacity needs are closer to being met.

INDOT is pursuing innovative finance and delivery to deliver this project to the community as quickly as possible in order to alleviate concerns about the need for improvements to SR 37 that have been expressed by various members of the community in preparation for the opening of I-69 Section 4. The innovative finance and delivery team may offer an alternative sequencing plan for review and acceptance by INDOT. Safety priorities including removing at-grade crossings through the urban area will continue to be of primary concern. INDOT is ready to begin right-of-way services once the use of federal funds is authorized. I-69 Section 5 will not be constructed as a toll facility.





I-69 SECTION 5 - CONSTRUCTION SEQUENCING

Segment	Project name, Description and limits
1	Vernal Pike ML STA 1790+00 to 1810+00 Industial Packinghouse all three constructed before removing signal at SR37
2	Fullerton Interchange ML STA 1541+00 to 1614+45 Mainline - south end thru alignment shift for Tapp Rd. That Road Connection Rockport/Fullerton Intersection Rockport Road Overpass - Interchange first, then Fullerton/Rockport, Rockport Overpass & That Road
3	Tapp Road thru 2nd Street/SR45 ML STA 1614+45 to 1724+50 Mainline - shift for Tapp Rd. thru south side of Indiana RR Tapp Road Overpass Cul-de-sac & Intersection Improvement w/in neighborhood (NW quad of Tapp interchange) 2nd Street Overpass - cannot be done at the same time as Fullerton - Western Mainline shift can be built in tandem with Tapp Rd interchange - Structure & Ramps at Tapp Road first - Structure & Ramps at 2nd St (use Tapp Road interchange for MOT) - Connect CD Ramps - Rebuild Mainline, using CDs for for MOT

Figure 2 – Construction Sequencing – Segment Details

I-69 SECTION 5 - CONSTRUCTION SEQUENCING			
Segment	Project name, Description and limits		
4	Third Street/SR48	ML STA 1724+50 to 1776+00	
	Mainline - from Indiana Railroad thru northern ramp connections for 3rd St./SR48 interchange (RR)		
	Any work on 3rd St/SR48		
	<ul style="list-style-type: none"> - should not be done during 2nd St/SR45 work - should not be done during Vernal Pike work - should be staged to address commercial shopping needs 		
5	Mainline - Vernal Pike, SR46 Interchange, up to Arlington Rd.	ML STA 1776+00 to 1850+00	
	Mainline - from the northern ramp connections for 3rd St./SR48 interchange thru Arlington Road bridge		
	<ul style="list-style-type: none"> - needs to go far enough north to account for lowering grade at Arlington 		
	Includes Bridge Widening for RR bridges		
	<ul style="list-style-type: none"> - could be constructed during the same season as the Fullerton Pike interchange - should be accomplished with the existing RW 		
6	Arlington Rd-N. of Walnut St.	ML STA 1850+00 to 2065+00	
	Mainline roadway reconstruction		
	Option A - Construct full interchange at N. Walnut St.		
	Option B - Maintain existing partial interchange at N. Walnut St.		
	Mainline structures		
	Access roads & structures		
	2 phase construction		
7	Kinser Pike OP/ Bottom Rd		
	Overpass of Kinser Pike		
	Maintain existing at grade till bridge completion		
	2 phase construction		

Figure 2 – Construction Sequencing – Segment Details (Con't.)



I-69 SECTION 5 - CONSTRUCTION SEQUENCING

Segment	Project name, Description and limits			
8	N. of Walnut St. - Wayport Road	ML STA	2065+00 to 2131+50	
	Mainline - north of Walnut St. to beginning of 85 ft shift west			
9	Sample Rd Interchange	ML STA	2131+50 to 2290+00	
	Mainline - from southern ramp limits to south of Chambers Pike			
	Sample Road Interchange and Access Roads to south of Chambers Pike			
	East access road from southern limit to Bloomington Junkyard			
	Use East access road as temp connection for 37 traffic to Sample Road			
	Detour West Sample road to northern existing connection			
10A	ML - Chambers Pike Area	ML STA	2290+00 to 2328+00	
	Mainline reconstruction			
	Build local access road by Sparks Garage			
	Detour N. Crossover road and Chambers Pike			
10B	Chambers Pike Overpass	ML STA	2290+00 to 2328+00	
	Build Overpass structure at Chambers Pike			
11	ML - Chambers Pike to Bryant Creek	ML STA	2328+00 to 2407+00	
	Mainline - N. of Chambers Pike OP to Bryant Creek Road			
	SB truck climbing lane			
	W access road- Existing Burma Road			

Figure 2 – Construction Sequencing – Segment Details (Con't.)



I-69 SECTION 5 - CONSTRUCTION SEQUENCING

Segment	Project name, Description and limits		
12	ML - Bryant Creek to Liberty Church Interchange	ML STA	2407+00 to 2555+00
	Mainline roadway reconstruction- Bryant Creek Road to Liberty Church Road Interchange		
	Mainline structures		
	Access Roads		
	Truck climbing lanes		
	Three phase MPT		
	Widening ML lanes from 23 ft to 24 ft		
13A	Liberty Church Interchange	ML STA	2555+00 to 2604+50
	Interchange and Access Roads		
	Includes both E/W access roads from ML Sta 2510+00 to Liberty Church Road		
	Build sections of access roads and structure over Little Indian Creek		
13B	ML - Liberty Church to Indian Creek	ML STA	2555+00 to 2604+50
	Mainline reconstruction		
	Mainline structures		
	Includes both E/W access roads from ML Sta 2510+00 to Liberty Church Road		
	Build sections of access roads and structure of Little Indian Creek		
14	ML -Liberty Church to Indian Creek	ML STA	2604+50 to 2665+00
	Mainline - from Liberty Church to end of project limits(north end)		
	Both access roads to the north of Liberty Church Road		

Figure 2 – Construction Sequencing – Segment Details (Con't.)

